

(12) DEMANDE INTERNATIONALE PUBLIÉE EN VERTU DU TRAITÉ DE COOPÉRATION  
EN MATIÈRE DE BREVETS (PCT)

(19) Organisation Mondiale de la Propriété  
Intellectuelle  
Bureau international



(43) Date de la publication internationale  
15 janvier 2004 (15.01.2004)

PCT

(10) Numéro de publication internationale  
WO 2004/005038 A1

(51) Classification internationale des brevets<sup>7</sup> : B41M 3/14,  
B42D 15/10, G03H 1/02

(21) Numéro de la demande internationale :  
PCT/FR2002/002368

(22) Date de dépôt international : 5 juillet 2002 (05.07.2002)

(25) Langue de dépôt : français

(26) Langue de publication : français

(71) Déposant (pour tous les États désignés sauf US) :  
THALES [FR/FR]; 173, boulevard Haussmann, F-75008  
Paris (FR).

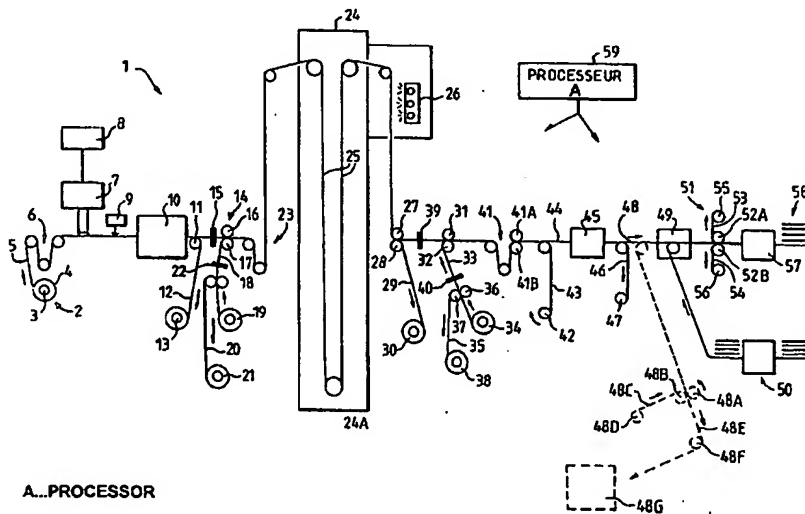
(72) Inventeurs; et

(75) Inventeurs/Déposants (pour US seulement) : GUION-  
NET, Sebastien [FR/FR]; Thales Intellectual Property,  
13, av. du Président Salvador Allendé, F-94117 Arcueil  
Cedex (FR). AGERON, Jérôme [FR/FR]; Thales Intel-  
lectual Property, 13, avenue du Prés. Salvador Allende,  
F-94117 Arcueil Cedex (FR). BRICOT, Claude [FR/FR];  
Thales Intellectual Property, 13, avenue du Prés. Salvador  
Allende, F-94117 Arcueil Cedex (FR). ROBIN, Philippe  
[FR/FR]; Thales Intellectual Property, 13, avenue du Prés.  
Salvador Allende, F-94117 Arcueil Cedex (FR). THE-  
BAULT, Yves [FR/FR]; Thales Intellectual Property, 13  
avenue du Président Salvador Allende, F- 94117 Arcueil  
Cedex (FR).

[Suite sur la page suivante]

(54) Title: METHOD FOR SERIAL PRODUCTION OF SECURE DOCUMENTS AND MACHINE THEREFOR

(54) Titre : PROCEDE DE REALISATION EN SERIE DE DOCUMENTS SECURISES ET MACHINE DE MISE EN OEUVRE



A...PROCESSOR

(57) Abstract: The invention concerns a method which consists in: serial recording on a photosensitive tape (5) of a succession of volume holograms each respectively concerning an information of a corresponding document to be made secure, each of said holograms being accompanied by an identification and positioning code printed on the same film; developing (7) and fixing (10) the resulting recorded holograms and simultaneously printing (50) the identity documents with their individual identification codes which are the same as those of the respective corresponding holograms, adding an adhesive to the holograms after they have been fixed, and bonding each hologram together with the corresponding document after verifying that their respective identification codes are matching.

(57) Abrégé : Le procédé de l'invention consiste, d'une part, à enregistrer en série (7) sur une bande de film photosensible (5) une succession d'hologrammes de volume relatifs chacun respectivement à une information d'un document correspondant à sécuriser, chacun de ces hologrammes étant accompagné d'un code d'identification

[Suite sur la page suivante]

WO 2004/005038 A1



(74) Mandataires : CHAVERNEFF, Vladimir etc.; THALES Intellectual Property, 13, avenue Président Salvador Allende, F-94117 Arcueil Cedex (FR).

(81) États désignés (*national*) : AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) États désignés (*régional*) : brevet ARIPO (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), brevet

eurasien (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), brevet européen (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), brevet OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Publiée :

— avec rapport de recherche internationale

En ce qui concerne les codes à deux lettres et autres abréviations, se référer aux "Notes explicatives relatives aux codes et abréviations" figurant au début de chaque numéro ordinaire de la Gazette du PCT.

et de positionnement imprimé sur le même film , à révéler (7) et à fixer (10) les hologrammes ainsi enregistrés, et d'autre part à imprimer en même temps (50) les documents d'identité avec leurs codes d'identification individuels qui sont les mêmes que ceux des hologrammes correspondants respectifs, à ajouter un adhésif aux hologrammes après leur fixation, et à assembler par collage chaque hologramme avec le document correspondant après vérification de la concordance de leurs codes d'identification respectifs.

BEST AVAILABLE COPY

# INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/FR 02/02368

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 B41M3/14 B42D15/10 G03H1/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 B41M B42D G03H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00 53423 A (AMERICAN BANK NOTE HOLOGRAPHIC) 14 September 2000 (2000-09-14) page 3, line 16 -page 5, line 6 ---	1,6
A	FR 2 780 915 A (BREGER EMBALLAGES SA) 14 January 2000 (2000-01-14) page 2, line 37 -page 3, line 19 page 14, line 31 -page 16, line 4 figure 2 ---	1,6
A	US 5 948 199 A (MCGREW STEPHEN PAUL) 7 September 1999 (1999-09-07) column 1, line 50 -column 2, line 17 column 3, line 39 -column 4, line 14 figure 1 --- -/--	1,6

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*&\* document member of the same patent family

Date of the actual completion of the international search

12 March 2003

Date of mailing of the international search report

18/03/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Krametz, E

# INTERNATIONAL SEARCH REPORT

International Application No.

PCT/FR 02/02368

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2 796 184 A (THOMSON CSF) 12 January 2001 (2001-01-12) cited in the application page 1, line 28 - line 31 ---	5
E	FR 2 826 135 A (THALES) 20 December 2002 (2002-12-20) claims; figure -----	1-12

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FR 02/02368

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0053423	A	14-09-2000	US 6440277 B1 AU 3879500 A WO 0053423 A1	27-08-2002 28-09-2000 14-09-2000
FR 2780915	A	14-01-2000	FR 2780914 A1 FR 2780915 A1 AT 224818 T AU 4626999 A CA 2337812 A1 DE 69903178 D1 DK 1104349 T3 EP 1104349 A1 WO 0002733 A1 JP 2002520193 T	14-01-2000 14-01-2000 15-10-2002 01-02-2000 20-01-2000 31-10-2002 03-02-2003 06-06-2001 20-01-2000 09-07-2002
US 5948199	A	07-09-1999	US 4906315 A US 4758296 A	06-03-1990 19-07-1988
FR 2796184	A	12-01-2001	FR 2796184 A1 AU 6292700 A EP 1196823 A1 WO 0104709 A1 JP 2003504694 T TR 200200005 T2	12-01-2001 30-01-2001 17-04-2002 18-01-2001 04-02-2003 23-09-2002
FR 2826135	A	20-12-2002	FR 2826135 A1	20-12-2002